



04.28-05

Docket No. 4873CIPCON  
PATENT

IFW  
AF  
3764

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re application of: Jacob Barak et al.

Serial No.: 09/941,909

Group No: 3764

Filed: 08/29/01

Examiner: J. Yu

For: PORTABLE AMBULANT PNEUMATIC COMPRESSION SLEEVE

Mail Stop Appeal Brief-Patents  
Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF (PATENT APPLICATION--37 CFR 192)

1. Transmitted herewith in triplicate is the APPEAL BRIEF in this application with respect to the Notice of Appeal filed on September 20, 2004 and the Notice of Non-Compliance dated March 31, 2005.

NOTE: "The appellant shall, within 2 months from the date of the notice of appeal under 1.191 in an application, reissue application, or patent under reexamination, or within the time allowed for response to the action appealed from, if such time is later, file a brief *in triplicate*." 37 CFR 1.192(a) [emphasis added]

2. STATUS OF APPLICANT

This application is on behalf of

X other than a small entity

— small entity  
verified statement:

— attached

— already filed

3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 CFR 1.17(f) the fee for filing the Appeal Brief is:

— small entity \$250.00

— other than a small entity \$500.00

Appeal Brief fee due \$

CERTIFICATE OF MAILING (37 CFR 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on 4/27/05 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EV535854184US addressed to the: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Mail Stop Appeal Brief - Patents.

Date: 4/27/05

Sarah E. Kennedy  
(Type or print name of person mailing paper)

4. EXTENSION OF TERM

NOTE: The time periods set forth in 37 CFR 1.192(a) are subject to the provision of 1.136 for patent applications. 37 CFR 1.191(d). Also see Notice of November 5, 1985 (1060 O.G. 27).

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136 apply.

*(complete (a) or (b) as applicable)*

- (a) — Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-d)) for the total number of months checked below:

Extension (months)	Fee for other than small entity	Fee for small entity
— one month	\$110.00	\$55.00
— two months	\$390.00	\$195.00
— three months	\$930.00	\$465.00
— four months	\$1,470.00	\$735.00
		Fee \$

If an additional extension of time is required please consider this a petition therefor.

*(check and complete the next item, if applicable)*

- An extension for \_\_\_\_\_ months has already been secured and the fee paid therefor of \$ \_\_\_\_\_ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$

or

- (b) X Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

5. TOTAL FEE DUE

The total fee due is:

Appeal brief fee \$  
Extension fee (if any) \$

TOTAL FEE DUE \$

6. FEE PAYMENT

— Attached is a check in the sum of \$ \_\_\_\_\_.

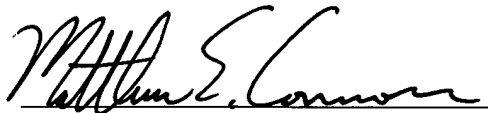
— Charge Account No. 19-0079 the sum of \_\_\_\_\_.  
A duplicate of this transmittal is attached.

7. FEE DEFICIENCY

NOTE: If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum, six month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to charge the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986, 1065 O.G. 31-33.

X If any additional extension and/or fee is required, this is a request therefor and to charge Account No. 19-0079.

Respectfully submitted,



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US Patent Application Serial Number: 09/941,909

Attorney Docket Number: 4873CIPCON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Jacob BARAK et al.

GROUP: 3764

SERIAL NO: 09/941,909

EXAMINER: J. Yu

FILED: August 29, 2001

Confirmation Number: 7948

FOR: PORTABLE AMBULANT PNEUMATIC COMPRESSION SLEEVE

Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

Sir:

LETTER

In response to the Notice of Non-Compliance dated March 31, 2005, the attached Appeal Brief, in compliance with 37 C.F.R. 41.37 is being respectfully submitted in connection with the above-identified application.

Respectfully submitted,

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MEC/MJN/mjn



US Patent Application Number 09/941,909

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND  
INTERFERENCES**

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On behalf of

**Jacob BARAK et al.**

**APPELLANTS**

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Application No.: **09/941,909**

Examiner: **J. Yu**

Filed: **August 29, 2001**

Group Art Unit: **3764**

Title: **PORTABLE    AMBULANT    PNEUMATIC    COMPRESSION  
SLEEVE**

**APPELLANT'S BRIEF ON APPEAL**



US Patent Application Number 09/941,909

## TABLE OF CONTENTS

I. REAL PARTY OF INTEREST.....	2
II. RELATED APPEALS AND INTERFERENCES .....	2
III. STATUS OF CLAIMS .....	2
IV. STATUS OF AMENDMENTS.....	2
V. SUMMARY OF CLAIMED SUBJECT MATTER .....	3-21
VI. ISSUES.....	21-22
VII. GROUPING OF CLAIMS.....	23
VIII. ARGUMENTS.....	23-83
IX. CONCLUSION .....	83
X. APPENDIX - CLAIMS APPEALED	



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FOR: PORTABLE AMBULANT PNEUMATIC COMPRESSION SLEEVE

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PO Box 1450  
Alexandria, Virginia 22313-1450

**APPEAL BRIEF FOR APPELLANT**

This Appeal Brief is being re-submitted in accordance with the Notice of Appeal filed on September 20, 2004 and the Notice of Non-Compliance dated March 31, 2005 in connection with the above-identified application.

**I. REAL PARTY OF INTEREST**

The party of real interest to this appeal is the Assignee, Medical Compression Systems (D.B.N.).

**II. RELATED APPEALS AND INTERFERENCES**

The Appellant knows of no other pending appeals or interferences that are related to this instant appeal.

**III. STATUS OF CLAIMS**

Claims 1-141 have been previously presented in this application. Claims 1-28, 43-72, 83, and 84 have subsequently been canceled without prejudice or disclaimer to the subject matter contained therein. Claims 29-42, 73-82, and 85-141 remain pending in the present application. Claims 29-42, 73-82, and 85-141 are appealed.

**IV. STATUS OF AMENDMENTS**

The Appellants submitted a Response under 37 C.F.R. 1.116 in June 5, 2004 amending various claims and the specification. As noted in the Advisory Action dated June 29, 2004, all the amendments, presented in the Response of June 5, 2004, have been entered by the Examiner. The Appellants have not filed any other Responses and/or Amendments subsequent to the Final Office Action, dated March 23, 2004.



**V. SUMMARY OF CLAIMED SUBJECT MATTER**

In accordance with 37 C.F.R. 41.37(2)(c)(v), the following are concise explanations of the subject matter defined in each of the independent claims (29, 36, 73, 75, 85, 87, 92, 97, 105, 112, 122, and 135) involved in this Appeal and for each dependent claim (30, 41, 74, 80, 81, 86, 88, 90, 93, 94, 95, 98, 99, 100, 101, 103, 110, 113, 120, 121, 123, 126, 127, 128, 133, and 140) argued separately.

**A. Independent claim 29**

Independent claim 29 recites a device for applying pressure to a body limb having a primary axis. The device comprises first and second inflatable cells, each of the first and second cells (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification) including at least three intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent, each compartment being elongated along a primary axis of a body limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification), cylindrical axes of the inflated compartments substantially aligning with the primary axis of the limb, the first and second cells being longitudinally adjacent each other, and arranged coaxially with respect to the primary axis of the limb (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification), the first and second cells being intermittently inflatable to apply pressure to the limb (see, for example, page 10, lines 15-17 of the written specification), wherein the inflatable cells each comprise inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification), the inner and outer shells being bonded together to form a perimetric cell bond to define the inflatable cell therebetween (see, for example, page 7, lines 20-22 of the written specification), the inner and outer shells being further bonded together to form compartmental bonds within the perimetric cell bond to define the plurality of intra-cell compartments (see, for example, page 8, lines 11-17 of the written specification), wherein the perimetric cell bond includes upper and lower perimetric cell bonds extending substantially in a lateral direction, and

left and right perimetric cell bonds extending substantially in the longitudinal direction, and wherein the compartmental bonds partly extend between the upper and lower perimetric cell bonds, wherein the compartmental bonds include perforations to allow for confluent air flow between compartments within a cell (see, for example, Figure 3 and page 8, lines 11-17 of the written specification), neighboring compartments along a lateral axis sharing a common border and being spatially fixed relative to each other, such that upon inflation of a cell, the cell becomes circumferentially constricted (see, for example, Figure 3 and page 8, line 11 through page 10, line 14 of the written specification), the first and second cells being non-confluent such that the first and second cells are separately inflatable (see, for example, page 8, lines 3-10 of the written specification); means for laterally coupling outermost compartments so as to form a sleeve substantially cylindrically (see, for example, Figures 4A, 4B & 9 and page 7, line 17 to page 10, line 14 of the written specification); inflating means for intermittently inflating the first and second cells (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); and control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the sleeve having a center point circumference of  $N\pi r$  when the cell is deflated and a center point circumference of  $2Nr$  when the cell is inflated, where  $N$  is the number of compartments in the cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds of the intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

B. Independent claim 36

Independent claim 36 recites an automatic portable ambulant system for applying pressure to a body limb. The automatic portable ambulant system comprises a sleeve including first and second inflatable cells (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification), each of the first and second inflatable cells including at least three intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent, each compartment being elongated along a primary axis of a body limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification), cylindrical axes of the inflated compartments being adapted to substantially align with the primary axis of a body limb (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification), the first and second cells being adjacent to each other and being adapted to be arranged coaxially with respect to the primary axis of a body limb, the first and second cells being intermittently inflatable to apply pressure to a body limb, wherein each inflatable cell comprises inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric cell bond, the perimetric bond defining outer boundaries of an inflatable cell and boundaries between the inflatable cells, the inner and outer shells being further bonded together to form compartmental bonds, the compartmental bonds defining boundaries between intra-cell compartments (see, for example, page 8, lines 11-17 of the written specification), wherein the perimetric cell bond includes upper and lower perimetric cell bonds extending substantially in a lateral direction, and left and right perimetric cell bonds extending substantially in the longitudinal direction, and wherein the compartmental bonds partly extend between the upper and lower perimetric cell bonds, wherein the compartmental bonds include perforations to allow for confluent air flow between intra-cell compartments within a cell (see, for example, Figure 3 and page 8, lines 11-17 of the written specification), the first cell becoming circumferentially constricted when the first cell is inflated, the second cell becoming circumferentially constricted when the second cell is inflated, the first and second cells being non-confluent such that the first

and second cells are separately inflatable (see, for example, page 8, lines 3-10 of the written specification); means for laterally coupling the outermost intra-cell compartments within a cell so as to form the sleeve substantially cylindrically (see, for example, Figures 4A, 4B & 9 and page 7, line 17 to page 10, line 14 of the written specification); a portable hand-held pump unit for intermittently inflating any one or more selected cells of the sleeve via a conduit (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification), the pump unit including a control unit for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the sleeve having a center point circumference of  $N\pi r$  when the cell is deflated and a center point circumference of  $2Nr$  when the cell is inflated, where  $N$  is the number of compartments in the cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds of the intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

C. Independent claim 73

Independent claim 73 recites a device for applying pressure to a body limb having a primary axis. The device comprises first and second inflatable cells (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification), each of the first and second inflatable cells including at least three intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent, each compartment being elongated along a primary axis of a body limb (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the first and second inflatable cells being adjacent each other and arranged

coaxially with respect to the primary axis of the limb when engaged with a limb (see, for example, page 7, lines 20-22 of the written specification); the first and second inflatable cells each including inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric bond about a perimeter of the inflatable cell, the perimetric bond defining the inflatable cell as a volume between the inner and outer shells and within the perimetric bond (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the inner and outer shells being further bonded together to form a plurality of compartmental bonds within the inflatable cell bond, the plurality of compartmental bonds defining the three intra-cell compartments (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the perimetric cell bond including first and second perimetric cell bond portions, the first and second perimetric cell bond portions being substantially parallel thereto, wherein a portion of the compartmental bonds partly extending between the first and second perimetric cell bond portions (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the compartmental bonds extending between the first and second perimetric cell bond portions including perforations to allow for confluent airflow between adjacent intra-cell compartments within a cell (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the adjacent intra-cell compartments within a cell being spatially fixed relative to each other such that upon inflation of the adjacent intra-cell compartments within the cell, the cell becomes circumferentially constricted (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the first and second inflatable cells being non-confluent such that the first and second inflatable cells are separately inflatable (see, for example, page 8, lines 3-10 of the written specification); means for laterally coupling outermost compartments so as to form a substantially cylindrical sleeve (see, for example, Figures 4A, 4B & 9 and page 7, line 17 to page 10, line 14 of the written specification); inflating means for intermittently inflating the intra-cell compartments of the first and second inflatable cells (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); and control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the

sleeve having a first intra-cell compartment center point circumference when the intra-cell compartments are deflated and a second intra-cell compartment center point circumference when the intra-cell compartments are inflated, the second intra-cell compartment center point circumference being less than the first intra-cell compartment center point circumference so as to provide for circumferential constriction, the first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds of the intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

D. Independent claim 75

Independent claim 75 recites an automatic portable ambulant system for applying pressure to a body limb. The automatic portable ambulant system comprises a sleeve including first and second inflatable cells (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification); the first and second inflatable cells each including at least three intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being elongated along a primary axis of a body limb (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the first and second inflatable cells being adjacent to each other so as to be adapted to be arranged coaxially with respect to the primary axis of a body limb (see, for example, page 7, lines 20-22 of the written specification); the first and second inflatable cells each including inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric bond about a perimeter of the inflatable cell, the perimetric bond defining the inflatable cell as a volume between the inner and outer shells and within the perimetric bond (see, for example, Figure 3 and page 8, lines 11-17 of the written

specification); the inner and outer shells being further bonded together to form a plurality of compartmental bonds within the inflatable cell bond, the plurality of compartmental bonds defining at least three intra-cell compartments (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the perimetric cell bond including first and second perimetric cell bond portions, the first and second perimetric cell bond portions being substantially parallel thereto, wherein a portion of the compartmental bonds partly extending between the first and second perimetric cell bond portions (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the compartmental bonds extending between the first and second perimetric cell bond portions including perforations to allow for confluent airflow between adjacent intra-cell compartments within a cell (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the first inflatable cell becoming circumferentially constricted when the intra-cell compartments of the first inflatable cell are inflated (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the second inflatable cell becoming circumferentially constricted when the intra-cell compartments of the second inflatable cell are inflated (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the first and second inflatable cells being non-confluent such that the first and second inflatable cells are separately inflatable (see, for example, page 8, lines 3-10 of the written specification); means for laterally coupling the outermost intra-cell compartments within a cell so as to form the sleeve into a substantially cylindrical shape (see, for example, Figures 4A, 4B & 9 and page 7, line 17 to page 10, line 14 of the written specification); and a portable hand-held pump unit for intermittently inflating any one or more selected cells of the sleeve via a conduit (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification), the pump unit including a control unit for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the sleeve having a first intra-cell compartment center point circumference when the intra-cell compartments are deflated and a second intra-cell compartment center point circumference when the intra-cell compartments are inflated, the second intra-cell compartment center point circumference being less than the first intra-cell compartment center point circumference so as to provide for

circumferential constriction, the first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds of the intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

E. Independent claim 85

Independent claim 85 recites a device for applying pressure to a body limb having a primary axis. The device comprises first and second inflatable cells (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification); the first and second inflatable cells each including at least three intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being elongated along a primary axis of the limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the first and second inflatable cells being adjacent each other and arranged coaxially with respect to the primary axis of the limb (see, for example, page 7, lines 20-22 of the written specification); the first and second inflatable cells each including inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric bond about a perimeter of the inflatable cell, the perimetric bond defining the inflatable cell as a volume between the inner and outer shells and within the perimetric bond (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the inner and outer shells being further bonded together to form a plurality of compartmental bonds within the inflatable cell bond, the plurality of compartmental bonds defining at least three intra-cell compartments (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the perimetric cell bond including first



and second perimetric cell bond portions, the first and second perimetric cell bond portions being substantially parallel thereto, wherein a portion of the compartmental bonds partly extending between the first and second perimetric cell bond portions (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the compartmental bonds extending between the first and second perimetric cell bond portions including perforations to allow for confluent airflow between adjacent intra-cell compartments within a cell (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the first inflatable cell becoming circumferentially constricted when the intra-cell compartments of the first inflatable cell are inflated (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the second inflatable cell becoming circumferentially constricted when the intra-cell compartments of the second inflatable cell are inflated (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the first and second inflatable cells being non-confluent such that the first and second inflatable cells are separately inflatable (see, for example, page 8, lines 3-10 of the written specification); means for laterally coupling the outermost intra-cell compartments within a cell so as to form a sleeve into a substantially cylindrical shape (see, for example, Figures 4A, 4B & 9 and page 7, line 17 to page 10, line 14 of the written specification); inflating means for intermittently inflating the first and second inflatable cells (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); and control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the sleeve having a first intra-cell compartment center point circumference when the intra-cell compartments are deflated and a second intra-cell compartment center point circumference when the intra-cell compartments are inflated, the second intra-cell compartment center point circumference being less than the first intra-cell compartment center point circumference so as to provide for circumferential constriction, the first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds of the intra-cell compartments, during inflation, being

drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

F. Independent claim 87

Independent claim 87 recites an automatic portable ambulant system for applying pressure to a body limb. The automatic portable ambulant system comprises a sleeve including first and second inflatable cells (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification); the first and second inflatable cells each including at least three intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being elongated along a primary axis of the limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the first and second inflatable cells being adjacent each other and arranged coaxially with respect to the primary axis of the limb (see, for example, page 7, lines 20-22 of the written specification); the first and second inflatable cells each including inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric bond about a perimeter of the inflatable cell, the perimetric bond defining the inflatable cell as a volume between the inner and outer shells and within the perimetric bond (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the inner and outer shells being further bonded together to form a plurality of compartmental bonds within the inflatable cell bond, the plurality of compartmental bonds defining at least three intra-cell compartments (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the perimetric cell bond including first and second perimetric cell bond portions, the first and second perimetric cell bond portions being substantially parallel thereto, wherein a portion of the compartmental bonds partly extending between the first and second perimetric cell bond portions (see, for example, Figure 3 and page 8, lines 11-17 of the

written specification); the compartmental bonds extending between the first and second perimetric cell bond portions including perforations to allow for confluent airflow between adjacent intra-cell compartments within a cell (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the first inflatable cell becoming circumferentially constricted when the intra-cell compartments of the first inflatable cell are inflated (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the second inflatable cell becoming circumferentially constricted when the intra-cell compartments of the second inflatable cell are inflated (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the first and second inflatable cells being non-confluent such that the first and second inflatable cells are separately inflatable (see, for example, page 8, lines 3-10 of the written specification); means for laterally coupling the outermost intra-cell compartments within a cell so as to form a sleeve into a substantially cylindrical shape (see, for example, Figures 4A, 4B & 9 and page 7, line 17 to page 10, line 14 of the written specification); and a portable hand-held pump unit for intermittently inflating any one or more selected cells of the sleeve via a conduit (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification), the pump unit including a control unit for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the sleeve having a first intra-cell compartment center point circumference when the intra-cell compartments are deflated and a second intra-cell compartment center point circumference when the intra-cell compartments are inflated, the second intra-cell compartment center point circumference being less than the first intra-cell compartment center point circumference so as to provide for circumferential constriction, the first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds of the intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and

4B and page 8, line 18 to page 10, line 14 of the written specification).

G. Independent claim 92

Independent claim 92 recites a device for applying pressure to a body limb having a primary axis. The device comprises an inflatable cell (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification); the inflatable cell including at least two intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent, each intra-cell compartment being elongated in a direction of the primary axis (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the inflatable cell further including inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric cell bond (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being further bonded together to form compartmental bonds within the perimetric cell bond, the perimetric bond and the compartmental bonds defining the intra-cell compartment (see, for example, page 7, lines 20-22 of the written specification); the perimetric cell bond including upper and lower perimetric cell bonds (see, for example, page 7, lines 20-22 of the written specification); the compartmental bonds partly extending between the upper and lower perimetric cell bonds (see, for example, page 7, lines 20-22 of the written specification); the compartmental bonds including perforations to allow for confluent airflow between adjacent intra-cell compartments within the cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation, the cell becomes circumferentially constricted (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the inflatable cell having a first center point circumference when the intra-cell compartments are deflated and a second center point circumference when the intra-cell compartments are inflated, the second center point circumference being less than the first center point circumference so as to provide for circumferential constriction, the first and second center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds of the intra-cell compartments, during

inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

H. Independent claim 97

Independent claim 97 recites a device for applying pressure to a body limb having a primary axis. The device comprises an inflatable cell (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification); the inflatable cell including compartmental bonds to form at least two intra-cell compartments, the compartmental bonds being parallel to the primary axis (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent to allow for confluent airflow between adjacent intra-cell compartments within the cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation, the cell becomes circumferentially constricted (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the inflatable cell having a first center point circumference when the intra-cell compartments are deflated and a second center point circumference when the intra-cell compartments are inflated, the second center point circumference being less than the first center point circumference so as to provide for circumferential constriction, the first and second center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

I. Independent claim 105

Independent claim 105 recites an automatic portable ambulant system for applying pressure to a body limb having a primary axis. The automatic portable ambulant system comprises an inflatable cell (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification); the inflatable cell including at least two intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent, each intra-cell compartment being elongated in a direction of the primary axis (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the inflatable cell further including inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric cell bond (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being further bonded together to form compartmental bonds within the perimetric cell bond, the perimetric bond and the compartmental bonds defining the intra-cell compartment (see, for example, page 7, lines 20-22 of the written specification); the perimetric cell bond including upper and lower perimetric cell bonds (see, for example, page 7, lines 20-22 of the written specification); the compartmental bonds partly extending between the upper and lower perimetric cell bonds (see, for example, page 7, lines 20-22 of the written specification); the compartmental bonds including perforations to allow for confluent airflow between adjacent intra-cell compartments within the cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation, the cell becomes circumferentially constricted (see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the inflatable cell having a first center point circumference when the intra-cell compartments are deflated and a second center point circumference when the intra-cell compartments are inflated, the second center point circumference being less than the first center point circumference so as to provide for circumferential constriction, the first and second center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds of the intra-cell compartments, during inflation, being drawn towards each other to decrease a distance

therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); and a portable hand-held pump unit for intermittently inflating the inflatable cell via a conduit (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the portable hand-held pump unit including a control unit for determining a treatment specificity of the inflatable cell and for determining a timing sequence for inflating of the inflatable cell based on the determined treatment specificity of the inflatable cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification).

J. Independent claim 112

Independent claim 112 recites a device for applying pressure to a body limb having a primary axis. The device comprises an inflatable cell (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification); the inflatable cell including at least two intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent, each intra-cell compartment being elongated in a direction of the primary axis (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the inflatable cell further including inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric cell bond (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being further bonded together to form compartmental bonds within the perimetric cell bond, the perimetric bond and the compartmental bonds defining the intra-cell compartment (see, for example, page 7, lines 20-22 of the written specification); the perimetric cell bond including upper and lower perimetric cell bonds (see, for example, page 7, lines 20-22 of the written specification); the compartmental bonds partly extending between the upper and lower perimetric cell bonds (see, for example, page 7, lines 20-22 of the written specification); the compartmental bonds including perforations to allow for confluent airflow between adjacent intra-cell compartments within the cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation, the cell becomes circumferentially constricted

(see, for example, Figure 3 and page 8, lines 11-17 of the written specification); the inflatable cell having a center point circumference of  $N\pi r$  when the cell is deflated and a center point circumference of  $2Nr$  when the cell is inflated, where  $N$  is the number of intra-cell compartments in the cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

K. Independent claim 122

Independent claim 122 recites a device for applying pressure to a body limb having a primary axis. The device comprises an inflatable cell (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification) including compartmental bonds to form at least two intra-cell compartments, the compartmental bonds being parallel to the primary axis (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent to allow for confluent airflow between adjacent intra-cell compartments within the cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation of the cell, the cell becomes circumferentially constricted (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the inflatable cell having a center point circumference of  $N\pi r$  when the cell is deflated and a center point circumference of  $2Nr$  when the cell is inflated, where  $N$  is the number of intra-cell compartments in the cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance



therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification).

L. Independent claim 135

Independent claim 135 recites an automatic portable ambulant system for applying pressure to a body limb having a primary axis. The automatic portable ambulant system comprises an inflatable cell, the inflatable cell (see, for example, reference 2 of Figure 1 and page 7, line 17 to page 8, line 10 of the written specification) including at least two intra-cell compartments (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the intra-cell compartments being confluent, each compartment being elongated in a direction of the primary axis (see, for example, reference 7 of Figure 2 and page 8, lines 8-17 of the written specification); the inflatable cell further including inner and outer shells of durable flexible material (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being bonded together to form a perimetric cell bond (see, for example, page 7, lines 20-22 of the written specification); the inner and outer shells being further bonded together to form compartmental bonds within the perimetric cell bond, the perimetric bond and the compartmental bonds defining the intra-cell compartment (see, for example, page 7, lines 20-22 of the written specification); the perimetric cell bond including upper and lower perimetric cell bonds (see, for example, page 7, lines 20-22 of the written specification); the compartmental bonds partly extending between the upper and lower perimetric cell bonds (see, for example, page 7, lines 20-22 of the written specification); the compartmental bonds including perforations to allow for confluent airflow between adjacent intra-cell compartments within the cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation of the cell, the cell becomes circumferentially constricted (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); the inflatable cell having a center point circumference of  $N\pi r$  when the cell is deflated and a center point circumference of  $2Nr$  when the cell is inflated, where  $N$  is the number of intra-cell compartments in the cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the

written specification); the compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction (see, for example Figures 4A and 4B and page 8, line 18 to page 10, line 14 of the written specification); and a portable hand-held pump unit for intermittently inflating the inflatable cell via a conduit (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the portable hand-held pump unit including a control unit for determining a treatment specificity of the inflatable cell and for determining a timing sequence for inflating of the inflatable cell based on the determined treatment specificity of the inflatable cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification).

M. Dependent claims 30, 113 & 123

Dependent claims 30, 113, and 123 recite that the center point circumference is decreased upon inflation by about 36% (see for example, page 9, lines 9-12 of the written specification).

N. Dependent claims 74, 81, 86, 88, 93 & 98

Dependent claims 74, 81, 86, 88, 93, and 98 recite that a ratio of the second center point circumference to the first center point circumference is about 0.64 (see for example, page 9, lines 9-12 of the written specification).

O. Dependent claims 41, 80, 90, 103, 110, 133 & 140

Dependent claims 41, 80, 90, 103, 110, 133, and 140 recite means for indicating to said control unit the treatment specificity of each cell (see for example, Figure 8E and page 15, line 12 through page 16, line 1, and page 18, lines 14-18 of the written specification).

P. Dependent claims 94, 99, 120 & 127

Dependent claims 94, 99, 120, and 127 recite inflating means for intermittently inflating said inflatable cell (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification) and control means for determining a treatment specificity of said

inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification).

Q. Dependent claims 95, 100 & 121

Dependent claims 95, 100, and 121 recite control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification).

R. Dependent claims 101 & 128

Dependent claims 95, 100, and 121 recite a portable hand-held pump unit for intermittently inflating said inflatable cell via a conduit (see, for example, reference 60 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification); the portable hand-held pump unit including a control unit for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell (see, for example, reference 68 of Figure 6 and page 11, line 9 to page 12, line 19 of the written specification).

**VI. ISSUES**

**A. Rejection of Claims 92, 93, 96-98, 104, 112-116, 118, & 122-125 under 35 U.S.C. §102(b) over Ericson**

The issue is whether claims 92, 93, 96-98, 104, 112-116, 118, and 122-125 are patentable in view of Ericson (US-A-3,424,151) in accordance with 35 U.S.C. §102(b).

**B. Rejection of Claims 29-33, 35, 36, 39-41, 73-75, 78-81, 83-90, 92-95, 97-103, 105, 108-110, 112-116, 118-128, 131-133, 135, & 138-140 under 35 U.S.C. §103 over Dye in view of Schneider and Ericson**

The issue is whether claims 29-33, 35, 36, 39-41, 73-75, 78-81, 83-90, 92-95, 97-103, 105, 108-110, 112-116, 118-128, 131-133, 135, and 138-140 are patentable in view of Dye (US-

A-5,795,312) in view of Schneider (US-A-4,206,751) and Ericson (US-A-3,424,151) in accordance with 35 U.S.C. §103.

**C. Rejection of Claims 34, 42, 82, 91, 104, 111, 117, & 134 under 35 U.S.C. §103 over Dye in view of Schneider, Ericson, and Dye et al.**

The issue is whether claims 34, 42, 82, 91, 104, 111, 117, and 134 are patentable in view of Dye (US-A-5,795,312) in view of Schneider (US-A-4,206,751), Ericson (US-A-3,424,151), and Dye et al. (US-A-4,029,087) in accordance with 35 U.S.C. §103. These dependent claims stand or fall with the patentability of the base claims and any intervening claims, and thus no separate arguments will be presented.

**D. Rejection of Claims 37, 38, 76, 77, 106, 107, 136, & 137 under 35 U.S.C. §103 over Dye in view of Schneider, Ericson, and Cariapa et al.**

The issue is whether claims 37, 38, 76, 77, 106, 107, 136, and 137 are patentable in view of Dye (US-A-5,795,312) in view of Schneider (US-A-4,206,751), Ericson (US-A-3,424,151), and Cariapa et al. (US-A-5,891,065) in accordance with 35 U.S.C. §103. These dependent claims stand or fall with the patentability of the base claims and any intervening claims, and thus no separate arguments will be presented.

**E. Rejection of Claim 141 under 35 U.S.C. §103 over Dye in view of Schneider, Ericson, Dye et al., and Cariapa et al.**

The issue is whether claim 141 is patentable in view of Dye (US-A-5,795,312) in view of Schneider (US-A-4,206,751), Ericson (US-A-3,424,151), Dye et al. (US-A-4,029,087), and Cariapa et al. (US-A-5,891,065) in accordance with 35 U.S.C. §103. This dependent claim stands or falls with the patentability of the base claim and any intervening claims, and thus no separate arguments will be presented.

## **VII. GROUPING OF CLAIMS**

All the present pending independent claims (29, 36, 73, 75, 85, 87, 92, 97, 105, 112, 122, and 135) are separately patentable for the various reasons set forth below. Dependent claims 30, 41, 74, 80, 81, 86, 88, 90, 93, 94, 95, 98, 99, 100, 101, 103, 110, 113, 120, 121, 123, 126, 127, 128, 133, and 140 are separately patentable for the various reasons set forth below. The remaining dependent claims stand or fall with the patentability of the base claims and any intervening claims.

## **VIII. ARGUMENTS**

### **A. Rejection of Claims 92, 93, 96-98, 104, 112-116, 118, & 122-125 under 35 U.S.C. §102(b) over Ericson**

Claims 92, 93, 96-98, 104, 112-116, 118, and 122-125 have been rejected under 35 U.S.C. §102(b) as being anticipated by Ericson (US-A-3,424,151). This rejection of claims 92, 93, 96-98, 104, 112-116, 118, and 122-125 under 35 U.S.C. §102(b) over the teachings of Ericson is respectfully traversed.

In formulating the rejection under 35 U.S.C. § 102(b), the Examiner alleges that Ericson discloses a device for applying pressure to a body limb having a primary axis, wherein the device comprising an inflatable cell. The Examiner further alleges that Ericson discloses an inflatable cell includes at least two intra-cell compartments, which are confluent with each intra-cell compartment being elongated in a direction of the primary axis. The Examiner also alleges that Ericson discloses that the adjacent intra-cell compartments are spatially fixed relative to each other such that upon inflation, the cell becomes circumferentially constricted.

To further support the rejection, the Examiner concludes, without providing any explicit evidence of actual teachings on the part of Ericson, that the inflatable cell of Ericson has a first center point circumference of  $N\pi r$  when the intra-cell compartments are deflated and a second center point circumference  $2Nr$  when the intra-cell compartments are inflated, the second center point circumference being less than the first center point circumference so as to provide circumferential constriction. The Examiner also concludes, again without providing any explicit

evidence of actual teachings on the part of Ericson, that during inflation, the compartmental bonds are drawn toward each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

These positions by the Examiner are respectfully traversed.

**ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 92**

With respect to independent claim 92, the claimed invention explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 92 expressly sets forth that the sleeve has a first intra-cell compartment center point circumference when the intra-cell compartments are deflated and a second intra-cell compartment center point circumference when the intra-cell compartments are inflated, the second intra-cell compartment center point circumference being less than the first intra-cell compartment center point circumference so as to provide for circumferential constriction, the first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center points of each contiguous intra-cell compartment of an inflatable cell, and **the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 92 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction. For this claimed spatial relationship to be realized by the sleeve of Ericson, the outer wall 22 of Ericson must, as the inner wall 24 moves inwardly, move outwardly.

However, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (compartmental bonds drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to anticipate that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 92.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 93**

With respect to dependent claim 93, the claimed invention explicitly sets forth that the ratio of the second center point circumference to the first center point circumference is about 0.64.

Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not

outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates that the ratio of the second center point circumference to the first center point circumference is about 0.64, as set forth by dependent claim 93.

#### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 97**

With respect to independent claim 97, the claimed invention explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 97 expressly sets forth that the sleeve has a first intra-cell compartment center point circumference when the intra-cell compartments are deflated and a second intra-cell compartment center point circumference when the intra-cell compartments are inflated, the second intra-cell compartment center point circumference being less than the first intra-cell compartment center point circumference so as to provide for circumferential constriction, the first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center points of each contiguous intra-cell compartment of an inflatable cell, and **the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 97 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is taught by Ericson, notwithstanding the fact that Ericson is void



of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeve is designed to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction. For this claimed spatial relationship to be realized by the sleeve of Ericson, the outer wall 22 of Ericson must, as the inner wall 24 moves inwardly, move outwardly.

However, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (compartmental bonds drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to anticipate that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 97.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 98**

With respect to dependent claim 98, the claimed invention explicitly sets forth that the ratio of the second center point circumference to the first center point circumference is about 0.64.

Ericson explicitly teaches and illustrates that the outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates that the ratio of the second center point circumference to the first center point circumference is about 0.64, as set forth by dependent claim 98.

**ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 112**

With respect to independent claim 112, the claimed invention explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 112 expressly sets forth that the sleeve has a first center point circumference when the intra-cell compartments are deflated, and that the sleeve has a second center point circumference when the intra-cell compartments are inflated wherein the center point circumference is a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell, and the second center point circumference is less than the first center point circumference, and **the compartmental bonds, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 112 directed to the circumferential

dimensional relationship between inflated and deflated intra-cell compartments, the Examiner contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction. For this claimed spatial relationship to be realized by the sleeve of Ericson, the outer wall 22 of Ericson must, as the inner wall 24 moves inwardly, move outwardly.

However, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (compartmental bonds drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson’s sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to anticipate that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance

therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 112.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 113**

With respect to dependent claim 113, the claimed invention explicitly sets forth that the center point circumference is decreased upon inflation by about 36%.

Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates that the center point circumference is decreased upon inflation by about 36%, as set forth by dependent claim 113.

#### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 122**

With respect to independent claim 122, the claimed invention explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 122 expressly sets forth that the sleeve has a first center point circumference when the intra-cell compartments are deflated, and that the sleeve has a second center point circumference when the intra-cell compartments are inflated wherein the center point circumference is a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell, and the second center point circumference is less than the first center point circumference, and the second center point circumference is less than the first center point circumference, and the compartmental bonds, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to

**decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 122 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall **24** “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall **24** to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeve is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction. For this claimed spatial relationship to be realized by the sleeve of Ericson, the outer wall **22** of Ericson must, as the inner wall **24** moves inwardly, move outwardly.

However, **Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape.** This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (compartmental bonds drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson’s sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to anticipate that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 122.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 123**

With respect to dependent claim 123, the claimed invention explicitly sets forth that the center point circumference is decreased upon inflation by about 36%.

Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates that the center point circumference is decreased upon inflation by about 36%, as set forth by dependent claim 123.

**ARGUMENTS WITH RESPECT TO CLAIMS 96, 104, 114-116, 118 & 124-125**

With respect to dependent claims 96, 104, 114-116, 118, and 124-125, these dependent claims stand or fall with the patentability of the base claims and any intervening claims, and thus no separate arguments will be presented.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw this rejection under 35 U.S.C. §102(b) over Ericson.

**B. Rejection of Claims 29-33, 35, 36, 39-41, 73-75, 78-81, 83-90, 92-95, 97-103, 105, 108-110, 112-116, 118-128, 131-133, 135, & 138-140 under 35 U.S.C. §103 over Dye in view of Schneider and Ericson**

Claims 29-33, 35, 36, 39-41, 73-75, 78-81, 83-90, 92-95, 97-103, 105, 108-110, 112-116, 118-128, 131-133, 135, and 138-140 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Dye (US-A-5,795,312) in view of Schneider (US-A-4,206,751) and Ericson (US-A-3,424,151). This rejection is respectfully traversed.

In formulating the rejection under 35 U.S.C. § 103(b), the Examiner alleges that Dye discloses all the various components except for some of the specifically claimed structure of the sleeve. To meet these deficiencies in Dye, the Examiner proposes to modify the teachings of Dye with the teachings of Schneider and Ericson. From the proposed modifications, the Examiner concludes that the presently claimed invention would be obvious to one of ordinary skill in the art.

These positions by the Examiner are respectfully traversed.

**ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 29**

With respect to independent claim 29, the claimed invention sets forth a device for applying pressure to a body limb having a primary axis. The device, as recited by independent claim 29, includes first and second inflatable cells, each of the first and second cells including at least three intra-cell compartments; the intra-cell compartments being confluent, each compartment being elongated along a primary axis of a body limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated, cylindrical axes of the inflated compartments substantially aligning with the primary axis of the limb, the first and second cells being longitudinally adjacent each other, and arranged coaxially with respect to the primary axis of the limb, the first and second cells being intermittently inflatable to apply pressure to the limb, wherein the inflatable cells each comprise inner and outer shells of durable flexible material, the inner and outer shells being bonded together to form a perimetric cell bond to define the inflatable cell therebetween, the inner and outer shells being further bonded together to form compartmental bonds within the perimetric cell bond to define the plurality of intra-cell compartments, wherein the perimetric cell bond includes upper and

lower perimetric cell bonds extending substantially in a lateral direction, and left and right perimetric cell bonds extending substantially in the longitudinal direction, and wherein the compartmental bonds partly extend between the upper and lower perimetric cell bonds, wherein the compartmental bonds include perforations to allow for confluent air flow between compartments within a cell, neighboring compartments along a lateral axis sharing a common border and being spatially fixed relative to each other, such that upon inflation of a cell, the cell becomes circumferentially constricted, the first and second cells being non-confluent such that the first and second cells are separately inflatable; means for laterally coupling outermost compartments so as to form a sleeve substantially cylindrically; inflating means for intermittently inflating the first and second cells; and control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell. The sleeve has a center point circumference of  $N\pi r$  when the cell is deflated and a center point circumference of  $2Nr$  when the cell is inflated, where  $N$  is the number of compartments in the cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell. The compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

In the rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf



and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by independent claim 29, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by independent claim 29, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by independent claim 29, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 29, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 29, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by independent claim 29, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 30**

With respect to dependent claim 30, the claimed invention explicitly sets forth that the center point circumference is decreased upon inflation by about 36%.

The Examiner has relied upon the teachings of Ericson to conclude that one of ordinary skill in the art would find the center point circumference being decreased upon inflation by about 36% obvious.

Contrary to the Examiner's assertions, Ericson explicitly teaches and illustrates that the outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation. Therefore, Ericson neither explicitly teaches nor illustrates that the center point circumference is decreased upon inflation by about 36%, as set forth by dependent claim 30.

Moreover, with respect to the teachings of Schneider and Dye, as also recognized by the Examiner, Schneider and Dye, singly or in combination, fail to teach or suggest, as set forth by dependent claim 30, that the center point circumference is decreased upon inflation by about 36%.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 30, that the center point circumference is decreased upon inflation by about 36%.

**ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 36**

With respect to independent claim 36, the claimed invention expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by independent claim 36, sets forth that a control device **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by independent claim 36, sets forth that a control device **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by independent claim 36, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 36, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner,

Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 36, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by independent claim 36, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 41**

With respect to dependent claim 41, the claimed invention expressly sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

In the rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the sleeve may include an electronic device which can convey to the pump unit identification information. This identification information is used by the control unit to determine the treatment specificity of each cell of the sleeve having the electronic device.

To meet this need, the presently claimed invention, as recited by dependent claim 41, sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

As noted above, Dye fails to disclose any means, within the conduit, for indicating to the control unit the treatment specificity of each cell. Thus, in view of the failure of Dye to provide any reasonable teachings directed to a device, within the conduit, for indicating to the control unit the treatment specificity of each cell, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 41, any means, within the conduit, for indicating to the control unit the treatment specificity of each cell.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 41, that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 73**

With respect to independent claim 73, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by independent claim 73, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by independent claim 73, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently

claimed invention, as recited by independent claim 73, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 73, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 73, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by independent claim 73, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 74**

With respect to dependent claim 74, the claimed invention explicitly sets forth that the ratio of the second center point circumference to the first center point circumference is about 0.64.

The Examiner has relied upon the teachings of Ericson to conclude that one of ordinary skill in the art would find the ratio of the second center point circumference to the first center point circumference is about 0.64 obvious.

Contrary to the Examiner's assertions, Ericson explicitly teaches and illustrates that the

outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation. Therefore, Ericson neither explicitly teaches nor illustrates that the ratio of the second center point circumference to the first center point circumference is about 0.64, as set forth by dependent claim 74.

Moreover, with respect to the teachings of Schneider and Dye, as also recognized by the Examiner, Schneider and Dye, singly or in combination, fail to teach or suggest, as set forth by dependent claim 74, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 74, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

#### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 75**

With respect to independent claim 75, the claimed invention expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by independent claim 75, sets forth that a control device **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by independent claim 75, sets forth that a control device **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by independent claim 75, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 75, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 75, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by independent claim 75,



the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 80**

With respect to dependent claim 80, the claimed invention expressly sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

In the rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the sleeve may include an electronic device which can convey to the pump unit identification information. This identification information is used by the control unit to determine the treatment specificity of each cell of the sleeve having the electronic device.

To meet this need, the presently claimed invention, as recited by dependent claim 80, sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

As noted above, Dye fails to disclose any means, within the conduit, for indicating to the control unit the treatment specificity of each cell. Thus, in view of the failure of Dye to provide any reasonable teachings directed to a device, within the conduit, for indicating to the control unit the treatment specificity of each cell, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 80, any means, within the conduit, for indicating to the control unit the treatment specificity of each cell.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 80,

that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 81**

With respect to dependent claim 81, the claimed invention explicitly sets forth that the ratio of the second center point circumference to the first center point circumference is about 0.64.

The Examiner has relied upon the teachings of Ericson to conclude that one of ordinary skill in the art would find the ratio of the second center point circumference to the first center point circumference is about 0.64 obvious.

Contrary to the Examiner's assertions, Ericson explicitly teaches and illustrates that the outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation. Therefore, Ericson neither explicitly teaches nor illustrates that the ratio of the second center point circumference to the first center point circumference is about 0.64, as set forth by dependent claim 81.

Moreover, with respect to the teachings of Schneider and Dye, as also recognized by the Examiner, Schneider and Dye, singly or in combination, fail to teach or suggest, as set forth by dependent claim 81, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 81, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

**ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 85**

With respect to independent claim 85, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by independent claim 85, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by independent claim 85, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by independent claim 85, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to

these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 85, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 85, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by independent claim 85, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 86**

With respect to dependent claim 86, the claimed invention explicitly sets forth that the ratio of the second center point circumference to the first center point circumference is about 0.64.

The Examiner has relied upon the teachings of Ericson to conclude that one of ordinary skill in the art would find the ratio of the second center point circumference to the first center point circumference is about 0.64 obvious.

Contrary to the Examiner's assertions, Ericson explicitly teaches and illustrates that the outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation. Therefore, Ericson neither explicitly teaches nor illustrates that the ratio of the second

center point circumference to the first center point circumference is about 0.64, as set forth by dependent claim 86.

Moreover, with respect to the teachings of Schneider and Dye, as also recognized by the Examiner, Schneider and Dye, singly or in combination, fail to teach or suggest, as set forth by dependent claim 86, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 86, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

#### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 87**

With respect to independent claim 87, the claimed invention expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by independent claim 87, sets forth that a control device **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by

independent claim 87, sets forth that a control device determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell. In other words, the presently claimed invention, as recited by independent claim 87, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 87, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 87, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by independent claim 87, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 88**

With respect to dependent claim 88, the claimed invention explicitly sets forth that the ratio of the second center point circumference to the first center point circumference is about 0.64.

The Examiner has relied upon the teachings of Ericson to conclude that one of ordinary skill in the art would find the ratio of the second center point circumference to the first center

point circumference is about 0.64 obvious.

Contrary to the Examiner's assertions, Ericson explicitly teaches and illustrates that the outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation. Therefore, Ericson neither explicitly teaches nor illustrates that the ratio of the second center point circumference to the first center point circumference is about 0.64, as set forth by dependent claim 88.

Moreover, with respect to the teachings of Schneider and Dye, as also recognized by the Examiner, Schneider and Dye, singly or in combination, fail to teach or suggest, as set forth by dependent claim 88, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 88, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 90**

With respect to dependent claim 90, the claimed invention expressly sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

In the rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye,

the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the sleeve may include an electronic device which can convey to the pump unit identification information. This identification information is used by the control unit to determine the treatment specificity of each cell of the sleeve having the electronic device.

To meet this need, the presently claimed invention, as recited by dependent claim 90, sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

As noted above, Dye fails to disclose any means, within the conduit, for indicating to the control unit the treatment specificity of each cell. Thus, in view of the failure of Dye to provide any reasonable teachings directed to a device, within the conduit, for indicating to the control unit the treatment specificity of each cell, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 90, any means, within the conduit, for indicating to the control unit the treatment specificity of each cell.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 90, that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

#### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 92**

With respect to independent claim 92, the claimed invention explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 92 expressly sets forth that the sleeve has a first intra-cell compartment center point circumference when the intra-cell compartments are deflated and a second intra-cell compartment center point circumference when the intra-cell compartments are inflated, the second intra-cell compartment center point circumference being less than the first intra-cell



compartment center point circumference so as to provide for circumferential constriction, the first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell, and the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

In addressing the limitations of independent claim 92 that are directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner apparently contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is not taught by Dye or Schneider, but taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 "moves segmentally axially toward the center of the sleeve," thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction. For this claimed spatial relationship to be realized by the sleeve of Ericson, the outer wall 22 of Ericson must, as the inner wall 24 moves inwardly, move outwardly.

However, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by

Ericson; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (compartmental bonds drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage. Therefore, Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 92.

Moreover, since Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 92, the proposed combination of Dye in view of Schneider and Ericson must necessarily fail to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 92.

### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 93**

With respect to dependent claim 93, the claimed invention explicitly sets forth that the ratio of the second center point circumference to the first center point circumference is about 0.64.

The Examiner has relied upon the teachings of Ericson to conclude that one of ordinary skill in the art would find the ratio of the second center point circumference to the first center point circumference is about 0.64 obvious.

Contrary to the Examiner's assertions, Ericson explicitly teaches and illustrates that the

outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation. Therefore, Ericson neither explicitly teaches nor illustrates that the ratio of the second center point circumference to the first center point circumference is about 0.64, as set forth by dependent claim 93.

Moreover, with respect to the teachings of Schneider and Dye, as also recognized by the Examiner, Schneider and Dye, singly or in combination, fail to teach or suggest, as set forth by dependent claim 93, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 93, that the ratio of the second center point circumference to the first center point circumference is about 0.64.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 94**

With respect to dependent claim 94, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 94, sets forth that control means determines a treatment specificity of each cell. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 94, sets forth that control means determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell. In other words, the presently claimed invention, as recited by dependent claim 94, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 94, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 94, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 94, the

determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 95**

With respect to dependent claim 95, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 95, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 95, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 95, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing

sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 95, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 95, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 95, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 97**

With respect to independent claim 97, the claimed invention explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 97 expressly sets forth that the sleeve has a first intra-cell compartment center point circumference when the intra-cell compartments are deflated and a second intra-cell compartment center point circumference when the intra-cell compartments are inflated, the second intra-cell compartment center point circumference being less than the first intra-cell compartment center point circumference so as to provide for circumferential constriction, the first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell, and **the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 97 that are directed to the

circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner apparently contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is not taught by Dye or Schneider, but taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall **24** “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall **24** to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction. For this claimed spatial relationship to be realized by the sleeve of Ericson, the outer wall **22** of Ericson must, as the inner wall **24** moves inwardly, move outwardly.

However, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (compartmental bonds drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage. Therefore, Ericson fails to teach or suggest that the compartmental bonds of the intra-cell

compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 97.

Moreover, since Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 97, the proposed combination of Dye in view of Schneider and Ericson must necessarily fail to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 97.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 99**

With respect to dependent claim 99, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.



To meet this need, the presently claimed invention, as recited by dependent claim 99, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 99, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 99, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 99, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 99, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 99, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 100**

With respect to dependent claim 100, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 100, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 100, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 100, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 100, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner,

Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 100, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 100, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 101**

With respect to dependent claim 101, the claimed invention expressly sets forth a control unit that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 101, sets forth that a control unit **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 101, sets forth that the control unit **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 101, requires two separate determinations, the

first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 101, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 101, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 101, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 103**

With respect to dependent claim 103, the claimed invention expressly sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

In the rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the sleeve may include an electronic device which can convey to the pump unit identification information. This identification information is used by the control unit to determine the treatment specificity of each cell of the sleeve having the electronic device.

To meet this need, the presently claimed invention, as recited by dependent claim 103, sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

As noted above, Dye fails to disclose any means, within the conduit, for indicating to the control unit the treatment specificity of each cell. Thus, in view of the failure of Dye to provide any reasonable teachings directed to a device, within the conduit, for indicating to the control unit the treatment specificity of each cell, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 103, any means, within the conduit, for indicating to the control unit the treatment specificity of each cell.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 103, that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

#### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 105**

With respect to independent claim 105, the claimed invention expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner

has failed to point to any particular passage in Dye or illustrated component that would support such a position.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by independent claim 105, sets forth that a control device **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by independent claim 105, sets forth that a control device **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by independent claim 105, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to

these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 105, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 105, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by independent claim 105, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 110**

With respect to dependent claim 110, the claimed invention expressly sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

In the rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the sleeve may include an electronic device which can convey to the pump unit identification information. This identification information is used by the control unit to determine the treatment specificity of each cell of the sleeve having the electronic device.

To meet this need, the presently claimed invention, as recited by dependent claim 110, sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

As noted above, Dye fails to disclose any means, within the conduit, for indicating to the control unit the treatment specificity of each cell. Thus, in view of the failure of Dye to provide any reasonable teachings directed to a device, within the conduit, for indicating to the control unit the treatment specificity of each cell, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 110, any means, within the conduit, for indicating to the control unit the treatment specificity of each cell.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 110, that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

#### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 112**

With respect to independent claim 112, the claimed invention explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 112 expressly sets forth that the sleeve has a first center point circumference when the intra-cell compartments are deflated, and that the sleeve has a second center point circumference when the intra-cell compartments are inflated wherein the center point circumference is a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell, and the second center point circumference is less than the first center point circumference, and **the compartmental bonds, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 112 that are directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner apparently contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is not taught by Dye or Schneider, but taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or



showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall **24** “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall **24** to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction. For this claimed spatial relationship to be realized by the sleeve of Ericson, the outer wall **22** of Ericson must, as the inner wall **24** moves inwardly, move outwardly.

However, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (compartmental bonds drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson’s sleeve, namely the immobilization of an injured limb without causing further damage. Therefore, Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 112.

Moreover, since Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 112, the proposed combination of Dye in view of Schneider and Ericson must necessarily fail to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 112.

### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 113**

With respect to dependent claim 113, the claimed invention explicitly sets forth that the center point circumference is decreased upon inflation by about 36%.

The Examiner has relied upon the teachings of Ericson to conclude that one of ordinary skill in the art would find the center point circumference being decreased upon inflation by about 36% obvious.

Contrary to the Examiner's assertions, Ericson explicitly teaches and illustrates that the outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation. Therefore, Ericson neither explicitly teaches nor illustrates that the center point circumference is decreased upon inflation by about 36%, as set forth by dependent claim 113.

Moreover, with respect to the teachings of Schneider and Dye, as also recognized by the Examiner, Schneider and Dye, singly or in combination, fail to teach or suggest, as set forth by dependent claim 113, that the center point circumference is decreased upon inflation by about 36%.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 113, that the center point circumference is decreased upon inflation by about 36%.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 120**

With respect to dependent claim 120, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 120, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 120, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 120, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 120, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 120, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 120, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 121**

With respect to dependent claim 121, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well

as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 121, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 121, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 121, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 121, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 121, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 121, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

**ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 122**

With respect to independent claim 122, the claimed invention explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 122 expressly sets forth that the sleeve has a first center point circumference when the intra-cell compartments are deflated, and that the sleeve has a second center point circumference when the intra-cell compartments are inflated wherein the center point circumference is a line passing through each center point of each adjacent intra-cell compartment of the inflatable cell, and the second center point circumference is less than the first center point circumference, and the second center point circumference is less than the first center point circumference, and **the compartmental bonds, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 122 that are directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner apparently contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is not taught by Dye or Schneider, but taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction. For this claimed spatial relationship to be realized by the sleeve of Ericson, the outer wall 22 of Ericson must, as the inner wall 24 moves inwardly, move outwardly.

However, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 of Ericson realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (compartmental bonds drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage. Therefore, Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 122.

Moreover, since Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 122, the proposed combination of Dye in view of Schneider and Ericson must necessarily fail to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth by independent claim 122.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 123**

With respect to dependent claim 123, the claimed invention explicitly sets forth that the center point circumference is decreased upon inflation by about 36%.

The Examiner has relied upon the teachings of Ericson to conclude that one of ordinary skill in the art would find the center point circumference being decreased upon inflation by about 36% obvious.

Contrary to the Examiner's assertions, Ericson explicitly teaches and illustrates that the outer wall **22** moves inwardly, not outwardly to be able to provide the claimed circumference constriction, to form a triangular shape. This inward motion, as taught by Ericson, drives the bonds apart, as well as drives the bonds away from the center point of the intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements, a concept not contemplated nor taught by Ericson; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** of Ericson realize the claimed spatial relationship during inflation. Therefore, Ericson neither explicitly teaches nor illustrates that the center point circumference is decreased upon inflation by about 36%, as set forth by dependent claim 123.

Moreover, with respect to the teachings of Schneider and Dye, as also recognized by the Examiner, Schneider and Dye, singly or in combination, fail to teach or suggest, as set forth by dependent claim 123, that the center point circumference is decreased upon inflation by about 36%.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 123, that the center point circumference is decreased upon inflation by about 36%.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 126**

With respect to dependent claim 126, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.



In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 126, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 126, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 126, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 126, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner,

Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 126, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 126, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 127**

With respect to dependent claim 127, the claimed invention expressly sets forth control means that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 127, sets forth that control means **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 127, sets forth that control means **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 127, requires two separate determinations, the

first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 127, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 127, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 127, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 128**

With respect to dependent claim 128, the claimed invention expressly sets forth a control unit that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by dependent claim 128, sets forth that a control unit **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by dependent claim 128, sets forth that the control unit **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently claimed invention, as recited by dependent claim 128, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 128, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 128, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 128, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

**ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 133**

With respect to dependent claim 133, the claimed invention expressly sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

In the rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the sleeve may include an electronic device which can convey to the pump unit identification information. This identification information is used by the control unit to determine the treatment specificity of each cell of the sleeve having the electronic device.

To meet this need, the presently claimed invention, as recited by dependent claim 133, sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

As noted above, Dye fails to disclose any means, within the conduit, for indicating to the control unit the treatment specificity of each cell. Thus, in view of the failure of Dye to provide any reasonable teachings directed to a device, within the conduit, for indicating to the control unit the treatment specificity of each cell, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 133, any means, within the conduit, for indicating to the control unit the treatment specificity of each cell.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 133, that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

### **ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 135**

With respect to independent claim 135, the claimed invention expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches control means within the sequential compression device to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

In contrast, the present application teaches that the portable pneumatic pressure system is capable of treating more than one part of the body by connecting more than one sleeve to the pump unit. Sometimes, for medical reasons, the treatment is to be applied on the left calf as well as the right foot, thereby requiring a different treatment for each sleeve, a sleeve for the left calf and a sleeve for the right foot. In such a situation, the sleeves may require different treatment specificities due to the sleeve's operability upon different parts of the body.

To meet this need, the presently claimed invention, as recited by independent claim 135, sets forth that a control unit **determines a treatment specificity of each cell**. After determining the treatment specificity of each cell, the presently claimed invention, as recited by independent claim 135, sets forth that the control unit **determines a timing sequence for inflating of each cell based on the determined treatment specificity of each cell**. In other words, the presently

claimed invention, as recited by independent claim 135, requires two separate determinations, the first determination being the treatment specificity of each cell, the second determination being the timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

As noted above, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 135, any determination of the treatment specificity of any cell, let alone each cell. Moreover, as also recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by independent claim 135, any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by independent claim 135, the determination of a treatment specificity of each cell; and/or the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

#### **ARGUMENTS WITH RESPECT TO DEPENDENT CLAIM 140**

With respect to dependent claim 140, the claimed invention expressly sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

In the rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner offers this allegation, with respect to the teachings of Dye,

the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a position.

In contrast, the present application teaches that the sleeve may include an electronic device which can convey to the pump unit identification information. This identification information is used by the control unit to determine the treatment specificity of each cell of the sleeve having the electronic device.

To meet this need, the presently claimed invention, as recited by dependent claim 140, sets forth that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

As noted above, Dye fails to disclose any means, within the conduit, for indicating to the control unit the treatment specificity of each cell. Thus, in view of the failure of Dye to provide any reasonable teachings directed to a device, within the conduit, for indicating to the control unit the treatment specificity of each cell, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

As recognized by the Examiner, Schneider and Ericson, singly or in combination, fail to teach or suggest, as set forth by dependent claim 140, any means, within the conduit, for indicating to the control unit the treatment specificity of each cell.

Therefore, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth by dependent claim 140, that the conduit includes means for indicating to the control unit the treatment specificity of each cell.

#### **ARGUMENTS WITH RESPECT TO REMAINING DEPENDENT CLAIMS**

With respect to the remaining dependent claims, these dependent claims stand or fall with the patentability of the base claims and any intervening claims, and thus no separate arguments will be presented.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw this rejection under 35 U.S.C. §103.



**C. Rejection of Claims 34, 42, 82, 91, 104, 111, 117, & 134 under 35 U.S.C. §103 over Dye in view of Schneider, Ericson, and Dye et al.**

These dependent claims stand or fall with the patentability of the base claims and any intervening claims, and thus no separate arguments will be presented.

**D. Rejection of Claims 37, 38, 76, 77, 106, 107, 136, & 137 under 35 U.S.C. §103 over Dye in view of Schneider, Ericson, and Cariapa et al.**

These dependent claims stand or fall with the patentability of the base claims and any intervening claims, and thus no separate arguments will be presented.

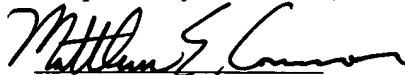
**E. Rejection of Claim 141 under 35 U.S.C. §103 over Dye in view of Schneider, Ericson, Dye et al., and Cariapa et al.**

This dependent claim stands or falls with the patentability of the base claim and any intervening claims, and thus no separate arguments will be presented.

**IX. CONCLUSION**

Accordingly, for all the reasons set forth above, the Honorable Board is respectfully requested to reverse all the outstanding rejections. Also, an early indication of allowability is earnestly solicited.

Respectfully submitted,



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## APPENDIX – CLAIMS APPEALED

### Claims 1-28 (Canceled)

29. (Appealed) A device for applying pressure to a body limb having a primary axis, comprising:

first and second inflatable cells, each of the first and second cells including at least three intra-cell compartments; said intra-cell compartments being confluent, each compartment being elongated along a primary axis of a body limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated, cylindrical axes of the inflated compartments substantially aligning with the primary axis of the limb, the first and second cells being longitudinally adjacent each other, and arranged coaxially with respect to the primary axis of the limb, the first and second cells being intermittently inflatable to apply pressure to the limb, wherein the inflatable cells each comprise inner and outer shells of durable flexible material, said inner and outer shells being bonded together to form a perimetric cell bond to define the inflatable cell therebetween, said inner and outer shells being further bonded together to form compartmental bonds within the perimetric cell bond to define the plurality of intra-cell compartments, wherein the perimetric cell bond includes upper and lower perimetric cell bonds extending substantially in a lateral direction, and left and right perimetric cell bonds extending substantially in the longitudinal direction, and wherein the compartmental bonds partly extend between the upper and lower perimetric cell bonds, wherein the compartmental bonds include perforations to allow for confluent air flow between compartments within a cell, neighboring compartments along a lateral axis sharing a common border and being spatially fixed relative to each other, such that upon inflation of a cell, the cell becomes circumferentially constricted, the first and second cells being non-confluent such that the first and second cells are separately inflatable;

means for laterally coupling outermost compartments so as to form a sleeve substantially cylindrically;

inflating means for intermittently inflating the first and second cells; and

control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell;

said sleeve having a center point circumference of  $N\pi r$  when the cell is deflated and a center point circumference of  $2Nr$  when the cell is inflated, where  $N$  is the number of compartments in the cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell;

said compartmental bonds of said intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

30. (Appealed) The device of claim 29, wherein the center point circumference is decreased upon inflation by about 36%.

31. (Appealed) The device of claim 29, wherein the bond comprises a weldment.

32. (Appealed) The device of claim 29, wherein adjacent compartments are contiguous.

33. (Appealed) The device of claim 29, wherein the perforations are located adjacent the perimetric cell bond.

34. (Appealed) The device of claim 29, wherein the perforations are located between compartmental bonds extending from the upper and lower perimetric bonds.

35. (Appealed) The device of claim 29, further comprising a fluid inlet to provide for inflation and deflation of the cell.

36. (Appealed) An automatic portable ambulant system for applying pressure to a body limb, comprising:

a sleeve including first and second inflatable cells, each of the first and second inflatable cells including at least three intra-cell compartments;

said intra-cell compartments being confluent, each compartment being elongated along a primary axis of a body limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated, cylindrical axes of the inflated compartments being adapted to substantially align with the primary axis of a body limb, the first and second cells being adjacent to each other and being adapted to be arranged coaxially with respect to the primary axis of a body limb, the first and second cells being intermittently inflatable to apply pressure to a body limb, wherein each inflatable cell comprises inner and outer shells of durable flexible material;

said inner and outer shells being bonded together to form a perimetric cell bond, said perimetric bond defining outer boundaries of an inflatable cell and boundaries between the inflatable cells, said inner and outer shells being further bonded together to form compartmental bonds, said compartmental bonds defining boundaries between intra-cell compartments, wherein the perimetric cell bond includes upper and lower perimetric cell bonds extending substantially in a lateral direction, and left and right perimetric cell bonds extending substantially in the longitudinal direction, and wherein the compartmental bonds partly extend between the upper and lower perimetric cell bonds, wherein the compartmental bonds include perforations to allow for confluent air flow between intra-cell compartments within a cell, the first cell becoming circumferentially constricted when the first cell is inflated, the second cell becoming circumferentially constricted when the second cell is inflated, the first and second cells being non-confluent such that the first and second cells are separately inflatable;

means for laterally coupling the outermost intra-cell compartments within a cell so as to form said sleeve substantially cylindrically;

a portable hand-held pump unit for intermittently inflating any one or more selected cells of the sleeve via a conduit, said pump unit including a control unit for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell;

said sleeve having a center point circumference of  $N\pi r$  when the cell is deflated and a center point circumference of  $2Nr$  when the cell is inflated, where  $N$  is the number of compartments in the cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell;

said compartmental bonds of said intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

37. (Appealed) The system of claim 36, wherein said pump unit is battery operated.

38. (Appealed) The system of claim 37, wherein said pump unit comprises a rechargeable battery.

39. (Appealed) The system of claim 36, wherein said pump unit comprises an air compressor.

40. (Appealed) The system of claim 36, wherein said conduit comprises a single tube for delivering fluid to said sleeve.

41. (Appealed) The system of claim 36, wherein said conduit comprises means for indicating to said control unit the treatment specificity of each cell.

42. (Appealed) The system of claim 36, wherein said sleeve comprises at least one self-operated valve.

**Claims 43-72 (Canceled)**

73. (Appealed) A device for applying pressure to a body limb having a primary axis, comprising:

first and second inflatable cells, each of the first and second inflatable cells including at least three intra-cell compartments;

said intra-cell compartments being confluent, each compartment being elongated along a primary axis of a body limb;

said first and second inflatable cells being adjacent each other and arranged coaxially with respect to the primary axis of the limb when engaged with a limb;

said first and second inflatable cells each including inner and outer shells of durable flexible material;

said inner and outer shells being bonded together to form a perimetric bond about a perimeter of the inflatable cell, said perimetric bond defining the inflatable cell as a volume between said inner and outer shells and within the perimetric bond;

said inner and outer shells being further bonded together to form a plurality of compartmental bonds within the inflatable cell bond, said plurality of compartmental bonds defining the three intra-cell compartments;

said perimetric cell bond including first and second perimetric cell bond portions, said first and second perimetric cell bond portions being substantially parallel thereto, wherein a portion of said compartmental bonds partly extending between said first and second perimetric cell bond portions;

said compartmental bonds extending between said first and second perimetric cell bond portions including perforations to allow for confluent airflow between adjacent intra-cell compartments within a cell;

said adjacent intra-cell compartments within a cell being spatially fixed relative to each other such that upon inflation of said adjacent intra-cell compartments within the cell, the cell becomes circumferentially constricted;

said first and second inflatable cells being non-confluent such that that said first and second inflatable cells are separately inflatable;

means for laterally coupling outermost compartments so as to form a substantially cylindrical sleeve;

inflating means for intermittently inflating said intra-cell compartments of said first and second inflatable cells; and

control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell;

said sleeve having a first intra-cell compartment center point circumference when said intra-cell compartments are deflated and a second intra-cell compartment center point circumference when said intra-cell compartments are inflated, said second intra-cell compartment center point circumference being less than said first intra-cell compartment center point circumference so as to provide for circumferential constriction, said first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell;

said compartmental bonds of said intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

74. (Appealed) The device of claim 73 wherein a ratio of said second center point circumference to said first center point circumference is about 0.64.

75. (Appealed) An automatic portable ambulant system for applying pressure to a body limb, comprising:

- a sleeve including first and second inflatable cells;

- said first and second inflatable cells each including at least three intra-cell compartments;

- said intra-cell compartments being confluent;

- said intra-cell compartments being elongated along a primary axis of a body limb;

- said first and second inflatable cells being adjacent to each other so as to be adapted to be arranged coaxially with respect to the primary axis of a body limb;

- said first and second inflatable cells each including inner and outer shells of durable flexible material;

- said inner and outer shells being bonded together to form a perimetric bond about a perimeter of the inflatable cell, said perimetric bond defining the inflatable cell as a volume between said inner and outer shells and within the perimetric bond;

- said inner and outer shells being further bonded together to form a plurality of compartmental bonds within the inflatable cell bond, said plurality of compartmental bonds defining at least three intra-cell compartments;

- said perimetric cell bond including first and second perimetric cell bond portions, said first and second perimetric cell bond portions being substantially parallel thereto, wherein a portion of said compartmental bonds partly extending between said first and second perimetric cell bond portions;

- said compartmental bonds extending between said first and second perimetric cell bond portions including perforations to allow for confluent airflow between adjacent intra-cell compartments within a cell;

- said first inflatable cell becoming circumferentially constricted when said intra-cell compartments of said first inflatable cell are inflated;

- said second inflatable cell becoming circumferentially constricted when said intra-cell compartments of said second inflatable cell are inflated;

- said first and second inflatable cells being non-confluent such that the first and second inflatable cells are separately inflatable;



means for laterally coupling the outermost intra-cell compartments within a cell so as to form said sleeve into a substantially cylindrical shape; and

a portable hand-held pump unit for intermittently inflating any one or more selected cells of the sleeve via a conduit, said pump unit including a control unit for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell;

said sleeve having a first intra-cell compartment center point circumference when said intra-cell compartments are deflated and a second intra-cell compartment center point circumference when said intra-cell compartments are inflated, said second intra-cell compartment center point circumference being less than said first intra-cell compartment center point circumference so as to provide for circumferential constriction, said first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell;

said compartmental bonds of said intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

76. (Appealed) The system of claim 75 wherein said pump unit is battery operated.

77. (Appealed) The system of claim 76 wherein said pump unit comprises a rechargeable battery.

78. (Appealed) The system of claim 75 wherein said pump unit comprises an air compressor.

79. (Appealed) The system of claim 75 wherein said conduit comprises a single tube for delivering fluid to said sleeve.

80. (Appealed) The system of claim 79 wherein said conduit comprises means for indicating to said control unit the treatment specificity of each cell.

81. (Appealed) The system of claim 75 wherein a ratio of said second center point circumference to said first center point circumference is about 0.64.

82. (Appealed) The system of claim 75 wherein said sleeve comprises at least one self-operated valve.

**Claims 83-84 (Canceled)**

85. (Appealed) A device for applying pressure to a body limb having a primary axis, comprising:

first and second inflatable cells;

said first and second inflatable cells each including at least three intra-cell compartments;

said intra-cell compartments being confluent;

said intra-cell compartments being elongated along a primary axis of the limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated;

said first and second inflatable cells being adjacent each other and arranged coaxially with respect to the primary axis of the limb;

said first and second inflatable cells each including inner and outer shells of durable flexible material;

said inner and outer shells being bonded together to form a perimetric bond about a perimeter of the inflatable cell, said perimetric bond defining the inflatable cell as a volume between said inner and outer shells and within the perimetric bond;

said inner and outer shells being further bonded together to form a plurality of compartmental bonds within the inflatable cell bond, said plurality of compartmental bonds defining at least three intra-cell compartments;

said perimetric cell bond including first and second perimetric cell bond portions, said first and second perimetric cell bond portions being substantially parallel thereto, wherein a portion of said compartmental bonds partly extending between said first and second perimetric cell bond portions;

said compartmental bonds extending between said first and second perimetric cell bond portions including perforations to allow for confluent airflow between adjacent intra-cell compartments within a cell;

said first inflatable cell becoming circumferentially constricted when said intra-cell compartments of said first inflatable cell are inflated;

said second inflatable cell becoming circumferentially constricted when said intra-cell compartments of said second inflatable cell are inflated;

said first and second inflatable cells being non-confluent such that said first and second inflatable cells are separately inflatable;

means for laterally coupling the outermost intra-cell compartments within a cell so as to form a sleeve into a substantially cylindrical shape;

inflating means for intermittently inflating the first and second inflatable cells; and

control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell;

said sleeve having a first intra-cell compartment center point circumference when said intra-cell compartments are deflated and a second intra-cell compartment center point circumference when said intra-cell compartments are inflated, said second intra-cell compartment center point circumference being less than said first intra-cell compartment center point circumference so as to provide for circumferential constriction, said first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell;

said compartmental bonds of said intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

86. (Appealed) The device of claim 85 wherein a ratio of said second center point circumference to said first center point circumference is about 0.64.

87. (Appealed) An automatic portable ambulant system for applying pressure to a body limb, comprising:

- a sleeve including first and second inflatable cells;

- said first and second inflatable cells each including at least three intra-cell compartments;

- said intra-cell compartments being confluent;

- said intra-cell compartments being elongated along a primary axis of a limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated;

- said first and second inflatable cells being adjacent each other and arranged coaxially with respect to the primary axis of the limb;

- said first and second inflatable cells each including inner and outer shells of durable flexible material;

- said inner and outer shells being bonded together to form a perimetric bond about a perimeter of the inflatable cell, said perimetric bond defining the inflatable cell as a volume between said inner and outer shells and within the perimetric bond;

- said inner and outer shells being further bonded together to form a plurality of compartmental bonds within the inflatable cell bond, said plurality of compartmental bonds defining at least three intra-cell compartments;

- said perimetric cell bond including first and second perimetric cell bond portions, said first and second perimetric cell bond portions being substantially parallel thereto, wherein a portion of said compartmental bonds partly extending between said first and second perimetric cell bond portions;

said compartmental bonds extending between said first and second perimetric cell bond portions including perforations to allow for confluent airflow between adjacent intra-cell compartments within a cell;

said first inflatable cell becoming circumferentially constricted when said intra-cell compartments of said first inflatable cell are inflated;

said second inflatable cell becoming circumferentially constricted when said intra-cell compartments of said second inflatable cell are inflated;

said first and second inflatable cells being non-confluent such that said first and second inflatable cells are separately inflatable;

means for laterally coupling the outermost intra-cell compartments within a cell so as to form said sleeve into a substantially cylindrical shape; and

a portable hand-held pump unit for intermittently inflating any one or more selected cells of the sleeve via a conduit, said pump unit including a control unit for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell;

said sleeve having a first intra-cell compartment center point circumference when said intra-cell compartments are deflated and a second intra-cell compartment center point circumference when said intra-cell compartments are inflated, said second intra-cell compartment center point circumference being less than said first intra-cell compartment center point circumference so as to provide for circumferential constriction, said first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell;

said compartmental bonds of said intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

88. (Appealed) The system of claim 87 wherein a ratio of said second center point circumference to said first center point circumference is about 0.64.

89. (Appealed) The system of claim 87 wherein said conduit comprises a single tube for delivering fluid to said sleeve.

90. (Appealed) The system of claim 89 wherein said conduit comprises means for indicating to said control unit the treatment specificity of each cell.

91. (Appealed) The system of claim 87 wherein said sleeve comprises at least one self-operated valve.

92. (Appealed) A device for applying pressure to a body limb having a primary axis, comprising:

- an inflatable cell;

- said inflatable cell including at least two intra-cell compartments;

- said intra-cell compartments being confluent, each intra-cell compartment being elongated in a direction of the primary axis;

- said inflatable cell further including inner and outer shells of durable flexible material;

- said inner and outer shells being bonded together to form a perimetric cell bond;

- said inner and outer shells being further bonded together to form compartmental bonds within said perimetric cell bond, said perimetric bond and said compartmental bonds defining the intra-cell compartment;

- said perimetric cell bond including upper and lower perimetric cell bonds;

- said compartmental bonds partly extending between said upper and lower perimetric cell bonds;

- said compartmental bonds including perforations to allow for confluent airflow between adjacent intra-cell compartments within said cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation, said cell becomes circumferentially constricted;

- said inflatable cell having a first center point circumference when said intra-cell compartments are deflated and a second center point circumference when said intra-cell compartments are inflated, said second center point circumference being less than said first

center point circumference so as to provide for circumferential constriction, said first and second center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell;

said compartmental bonds of said intra-cell compartments, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

93. (Appealed) The device of claim 92 wherein a ratio of said second center point circumference to said first center point circumference is about 0.64.

94. (Appealed) The device of claim 92, further comprising:  
inflating means for intermittently inflating said inflatable cell; and  
control means for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

95. (Appealed) The device of claim 92, further comprising control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

96. (Appealed) The device of claim 92 wherein said inflatable cell comprises at least one self-operated valve.

97. (Appealed) A device for applying pressure to a body limb having a primary axis, comprising:

an inflatable cell;

said inflatable cell including compartmental bonds to form at least two intra-cell compartments, said compartmental bonds being parallel to the primary axis;

said intra-cell compartments being confluent to allow for confluent airflow between adjacent intra-cell compartments within said cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation, said cell becomes circumferentially constricted;

said inflatable cell having a first center point circumference when said intra-cell compartments are deflated and a second center point circumference when said intra-cell compartments are inflated, said second center point circumference being less than said first center point circumference so as to provide for circumferential constriction, said first and second center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell;

said compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

98. (Appealed) The device of claim 97 wherein a ratio of said second center point circumference to said first center point circumference is about 0.64.

99. (Appealed) The device of claim 97, further comprising:

inflating means for intermittently inflating said inflatable cell; and

control means for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.



100. (Appealed) The device of claim 97, further comprising control means for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

101. (Appealed) The device of claim 97, further comprising a portable hand-held pump unit for intermittently inflating said inflatable cell via a conduit;

said portable hand-held pump unit including a control unit for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

102. (Appealed) The device of claim 101 wherein said conduit comprises a single tube for delivering fluid to said inflatable cell.

103. (Appealed) The device of claim 102 wherein said conduit comprises means for indicating to said control unit the treatment specificity of said inflatable cell.

104. (Appealed) The device of claim 97 wherein said inflatable cell comprises at least one self-operated valve.

105. (Appealed) An automatic portable ambulant system for applying pressure to a body limb having a primary axis, comprising:

an inflatable cell; and

said inflatable cell including at least two intra-cell compartments;

said intra-cell compartments being confluent, each compartment being elongated in a direction of the primary axis; and

said inflatable cell further including inner and outer shells of durable flexible material;

said inner and outer shells being bonded together to form a perimetric cell bond;

said inner and outer shells being further bonded together to form compartmental bonds within said perimetric cell bond, said perimetric bond and said compartmental bonds defining the

intra-cell compartment;

said perimetric cell bond including upper and lower perimetric cell bonds;

said compartmental bonds partly extending between said upper and lower perimetric cell bonds;

said compartmental bonds including perforations to allow for confluent airflow between adjacent intra-cell compartments within said cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation, said cell becomes circumferentially constricted;

said inflatable cell having a first center point circumference when said intra-cell compartments are deflated and a second center point circumference when said intra-cell compartments are inflated, said second center point circumference being less than said first center point circumference so as to provide for circumferential constriction, said first and second center point circumferences, each being defined as a line passing through each center point of each contiguous intra-cell compartment of an inflatable cell;

said compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction;

a portable hand-held pump unit for intermittently inflating said inflatable cell via a conduit;

said portable hand-held pump unit including a control unit for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

106. (Appealed) The system of claim 105 wherein said portable hand-held pump unit is battery operated.

107. (Appealed) The system of claim 105 wherein said portable hand-held pump unit comprises a rechargeable battery.

108. (Appealed) The system of claim 105 wherein said portable hand-held pump unit comprises an air compressor.

109. (Appealed) The system of claim 105 wherein said conduit comprises a single tube for delivering fluid to said inflatable cell.

110. (Appealed) The system of claim 105 wherein said conduit comprises means for indicating to said control unit the treatment specificity of said inflatable cell.

111. (Appealed) The system of claim 105 wherein said inflatable cell comprises at least one self-operated valve.

112. (Appealed) A device for applying pressure to a body limb having a primary axis, comprising:

- an inflatable cell, said inflatable cell including at least two intra-cell compartments; said intra-cell compartments being confluent, each compartment being elongated in a direction of the primary axis;

- said inflatable cell further including inner and outer shells of durable flexible material;

- said inner and outer shells being bonded together to form a perimetric cell bond;

- said inner and outer shells being further bonded together to form compartmental bonds within said perimetric cell bond, said perimetric bond and said compartmental bonds defining the intra-cell compartment;

- said perimetric cell bond including upper and lower perimetric cell bonds;

- said compartmental bonds partly extending between said upper and lower perimetric cell bonds;

- said compartmental bonds including perforations to allow for confluent airflow between adjacent intra-cell compartments within said cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation of said cell, said cell becomes circumferentially constricted;

said inflatable cell having a center point circumference of  $N\pi r$  when said cell is deflated and a center point circumference of  $2Nr$  when said cell is inflated, where  $N$  is the number of intra-cell compartments in said cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell;

said compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

113. (Appealed) The device of claim 112, wherein the center point circumference is decreased upon inflation by about 36%.

114. (Appealed) The device of claim 112, wherein the bond comprises a weldment.

115. (Appealed) The device of claim 112, wherein adjacent intra-cell compartments are contiguous.

116. (Appealed) The device of claim 112, wherein the perforations are located adjacent the perimetric cell bond.

117. (Appealed) The device of claim 112, wherein the perforations are located between compartmental bonds extending from the upper and lower perimetric bonds.

118. (Appealed) The device of claim 112, further comprising a fluid inlet to provide for inflation and deflation of the cell.

119. (Appealed) The device of claim 112, further comprising inflating means for intermittently inflating said inflatable cell.

120. (Appealed) The device of claim 112, further comprising:  
inflating means for intermittently inflating said inflatable cell; and  
control means for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

121. (Appealed) The device of claim 112, further comprising control means for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

122. (Appealed) A device for applying pressure to a body limb having a primary axis, comprising:

an inflatable cell including compartmental bonds to form at least two intra-cell compartments, said compartmental bonds being parallel to the primary axis;

said intra-cell compartments being confluent to allow for confluent airflow between adjacent intra-cell compartments within said cell, adjacent intra-cell compartments being spatially fixed relative to each other, such that upon inflation of said cell, said cell becomes circumferentially constricted;

said inflatable cell having a center point circumference of  $N\pi r$  when said cell is deflated and a center point circumference of  $2Nr$  when said cell is inflated, where  $N$  is the number of intra-cell compartments in said cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell;

said compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

123. (Appealed) The device of claim 122, wherein the center point circumference is decreased upon inflation by about 36%.

124. (Appealed) The device of claim 122, further comprising a fluid inlet to provide for inflation and deflation of the cell.

125. (Appealed) The device of claim 122, further comprising inflating means for intermittently inflating said inflatable cell.

126. (Appealed) The device of claim 122, further comprising:  
inflating means for intermittently inflating said inflatable cell; and  
control means for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

127. (Appealed) The device of claim 122, further comprising control means for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

128. (Appealed) The device of claim 122, further comprising a portable hand-held pump unit for intermittently inflating said inflatable cell via a conduit;

said portable hand-held pump unit including a control unit for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

129. (Appealed) The device of claim 128, wherein said portable hand-held pump unit is battery operated.

130. (Appealed) The device of claim 129, wherein said portable hand-held pump unit comprises a rechargeable battery.

131. (Appealed) The device of claim 128, wherein said portable hand-held pump unit comprises an air compressor.

132. (Appealed) The device of claim 128, wherein said conduit comprises a single tube for delivering fluid to said inflatable cell.

133. (Appealed) The device of claim 128, wherein said conduit comprises means for indicating to said control unit the treatment specificity of said inflatable cell.

134. (Appealed) The device of claim 128, wherein said inflatable cell comprises at least one self-operated valve.

135. (Appealed) An automatic portable ambulant system for applying pressure to a body limb having a primary axis, comprising:

- an inflatable cell, said inflatable cell including at least two intra-cell compartments;
- said intra-cell compartments being confluent, each compartment being elongated in a direction of the primary axis; and

- said inflatable cell further including inner and outer shells of durable flexible material;
- said inner and outer shells being bonded together to form a perimetric cell bond;
- said inner and outer shells being further bonded together to form compartmental bonds within said perimetric cell bond, said perimetric bond and said compartmental bonds defining the intra-cell compartment;

- said perimetric cell bond including upper and lower perimetric cell bonds;
- said compartmental bonds partly extending between said upper and lower perimetric cell bonds;

- said compartmental bonds including perforations to allow for confluent airflow between adjacent intra-cell compartments within said cell, adjacent intra-cell compartments being

spatially fixed relative to each other, such that upon inflation of said cell, said cell becomes circumferentially constricted;

said inflatable cell having a center point circumference of  $N\pi r$  when said cell is deflated and a center point circumference of  $2Nr$  when said cell is inflated, where  $N$  is the number of intra-cell compartments in said cell, and where  $r$  is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell;

said compartmental bonds, during inflation, being drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction;

a portable hand-held pump unit for intermittently inflating said inflatable cell via a conduit;

said portable hand-held pump unit including a control unit for determining a treatment specificity of said inflatable cell and for determining a timing sequence for inflating of said inflatable cell based on the determined treatment specificity of said inflatable cell.

136. (Appealed) The system of claim 135, wherein said portable hand-held pump unit is battery operated.

137. (Appealed) The system of claim 136, wherein said portable hand-held pump unit comprises a rechargeable battery.

138. (Appealed) The system of claim 136, wherein said portable hand-held pump unit comprises an air compressor.

139. (Appealed) The system of claim 136, wherein said conduit comprises a single tube for delivering fluid to said sleeve.

140. (Appealed) The system of claim 136, wherein said conduit comprises means for indicating to said control unit the treatment specificity of said inflatable cell.



141. (Appealed) The system of claim 136, wherein said sleeve comprises at least one self-operated valve.